Southern
PLANT HIRE SERVICES

Emergency Contact Numbers:

Police, Fire, Ambulance	000
SES	132 500
Vic Roads	13 11 70
EPA Vic	1300 EPA VIC (1300 372 842)

Safe Work Method Statement

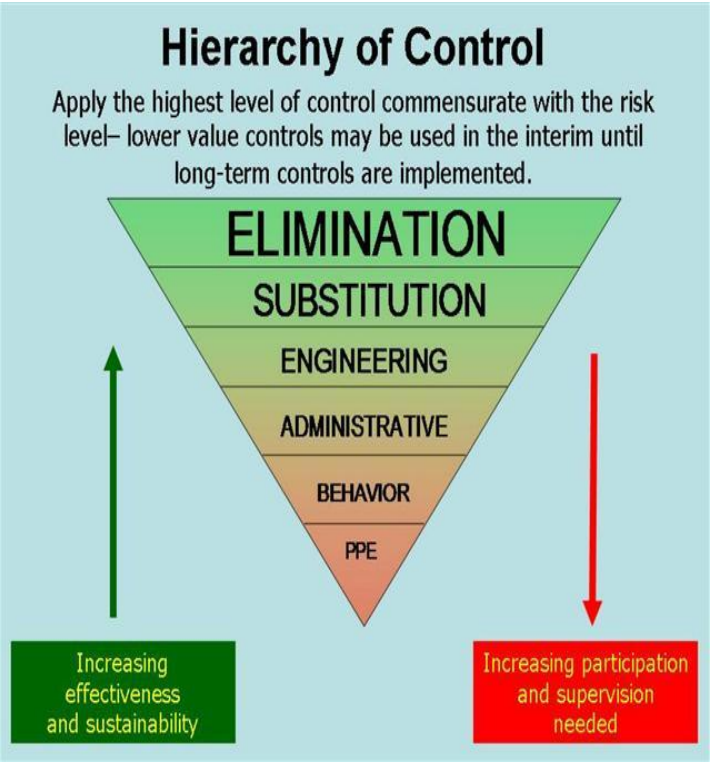
WMS No:		Task/Activity	Excavator Operation
SPH Job No:		Date to be Reviewed :	
Project:		Personnel responsible for monitoring this activity:	
Site Address:		Monitoring and review:	
Principal Contractor :		Southern Plant Hire Client:	
Sub-Contractor:		Operator Name:	

References

Vic OHS Act 2004	Vic OHS Regulations 2007	Code of Practice for Plant 1995 & 2005	Worksite Safety Traffic Management 2004. No S351 31 August 2010
Manual Handling Code of Practice	Code of Practice Safety Precautions in Trenching Operations	Compliance Code: Prevention of falls in General Construction	Environmental Protection and Biodiversity Conservation Act 1999
Environmental Protection Act 1970	Flora and Fauna Guarantee Act 1988	State Environmental Protection Policy (waters of Victoria) 2003	Environment Protection (Industrial Waste Resource) Regulations 2009
	Environmental Guidelines for Major Construction Site 1996	EPA Victoria – Doing it Right on Subdivisions 2004	

Personnel Consulted with on this WMS

Position:	Name	Signature	Date


Hierarchy of Control
Apply the highest level of control commensurate with the risk level– lower value controls may be used in the interim until long-term controls are implemented.
ELIMINATION
SUBSTITUTION
ENGINEERING
ADMINISTRATIVE
BEHAVIOR
PPE
Increasing effectiveness and sustainability
Increasing participation and supervision needed

Consequences / Likelihood	Insignificant	Minor	Moderate	Major	Catastrophic
Rare	1	2	3	4	5
Unlikely	2	4	6	8	10
Possible	3	6	9	12	15
Likely	4	8	12	16	20
Almost Certain	5	10	15	20	25

Key:
- 1-4 Very Low (Green)
- 5-11 Low (Yellow)
- 12-16 Medium (Orange)
- 17-25 High (Red)

Equipment Training and Qualifications

Plant and Equipment Required for this Activity	**Personal Protective Equipment**	
Excavator and attachments including but not limited to buckets, Breaker, Auger, Ripper etc.	High Visibility Clothing AS/NZS 1906.4:2012	Gloves appropriate for task AS/NZS 2161.1:2000
	Safety Footwear (steel capped)AS/NZ 2210.3:2009	Appropriate clothing as per site requirements
Specific Training Required for this Activity		
Site Specific Induction Certificate of Competency to Operate excavator Construction Industry OHS Induction (Red Card)	Safety Glasses as required AS?NZ 1336:1997	Head Protection as required AS/NZ 1800:1998
	Wide Brimmed Hat as required AS/NZ 4399	Check for any site specific PPE requirements
	Sun Screen as required AS/NZ 2604: 1998	Hearing Protection as required AS/NZ 1269.3:2005

Hazard/Aspect (Procedure Step)	Impact (What can go wrong)	Risk Score Without controls			Management Controls (Controls to be in place in order to manage potential hazards)	Risk Score With Controls			Person Responsible (To ensure controls are applied)
		Con	Prob	Risk		Con	Prob	Risk	
Pre-start	Uncontrolled plant movement during prestart acceptance and daily checks striking personnel	4	3	12	Isolate plant before commencing pre-start Identify delineation between site personnel and plant.Ensure that all relevant documentation is obtained through pre-start acceptance.	4	2	8	Plant Operator Site Personnel.
	Fuel, oil or chemical spill.	5	4	20	Operator to undertake pre-start daily check. Isolation procedures to be implemented. Safety observer required during inspection if machine operation is required. All hoists and lifting gear will be inspected. All hydraulic, lubrication, and fuel hoses will be in good order, free from abrasion and unions tight and free from leaks.	4	2	8	Plant Operator Site Foreman
	Importation/extraction of weeds and/or pests onto worksite.	2	4	8	Ensure vehicles, machines and attachments are free of weeds prior to removal from site. Remove any declared weeds from site if they are found to be growing at any time. Ensure general waste bin lids are closed at all times.	2	1	2	Plant Operator Site Foreman Site staff
	Slips, trips and falls	4	3	12	Housekeeping, visual inspection. Ensure that machine cabin is clean and free of construction tools and equipment. Always	2	1	2	Plant Operator
	Uncontrolled plant movements during construction and deliveries striking personnel	4	3	12	Ensure UHF channel is discussed during morning pre-start. Ensure all personnel are aware of designated work areas and no go zones as defined by traffic guidance schemes. Ensure all personnel involved in the task understand the machines lifting capacity at full reach.	4	2	8	Site Foreman Plant Operator

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Unloading Excavator from float	Uncontrolled plant movement Plant striking personnel	5	3	15	Float to park on level firm surface, spotter to guide excavator off float. No personnel to be standing on float whilst plant is being moved. Spotter to be standing outside the overall extended height of the plant and have eye contact with the operator at all times. Hand signals to be identified prior to activity commencing. Ensure that area is identified by site supervisor to ensure that the no go zone areas are not encroached.	3	2	6	Plant Operator Spotter Float Operator
Entering and exiting excavator during the course of construction etc.	Slips, trips and falls Uncontrolled plant movement	4	3	12	Always maintain 3 points of contact when entering or exiting excavator. If the excavator is fitted with a laser computer system ensure it is turned off before exiting the machine.	4	2	8	Plant Operator
Movement of plant	Plant collision Plant/personnel collision Reduced visibility from dust Inhalation and sickness from dust	5	4	20	Keep vehicle speeds below site permitted maximum. Use watercart to minimize dust (particularly trafficable areas). Where appropriate consider stopping works on days of high winds. Communicate with other crews onsite using designated onsite UHF channel or hand signals. Reversing beeper and flashing light on mobile plant. PPE high visibility clothing to be worn at all times. Operator to check all potential blind spots through use of mirrors and looking over both shoulders prior to traversing. Where practicable, no personnel/plant/machine to work within the radius of the overall reach or lifted body height of the plant. Where practicable, plant to be segregated from other plant.	4	2	8	Plant Operator

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Movement of plant	Increased noise or vibration arising from worksite	2	5	10	Ensure exhaust and mufflers are checked regularly for cracks and breaks. Minimise the use of engine brakes particularly in built up areas. Only work within designated work times (as per council or EPA requirements). Keep maintenance schedule on plant up to date.	4	2	8	Plant Operator
Working with and near trenches and excavations	Trench collapse, plant rollover, workers struck by plant	5	4	20	**Hard hats to be worn at all times whenever in or near trench or excavation.** No plant truck or machine should encroach within _____ distance of trench/excavation. When encroaching within this distance, spotters used to ensure the safety of personnel and integrity of trench while mobile vibrating plant is working within _____ distance of the trench/excavation. No personnel in trench while manual use vibrating plant is working within _____ distance of the trench/excavation. Deposit spoil uphill, if required place toe boards in front of spoil so pile is secure at all times.	3	2	6	Site Foreman Engineers Plant Operator Site staff
	Workers hit by debris	5	4	20	Hard hats to be worn at all times whenever in or near trench or excavation. Only plant necessary for task to work near excavations. Other plant/machines to stay a safe distance from excavation with help from site supervisor. No personnel in trench while vibrating plant are working in the vicinity. Consult ground staff prior to works being undertaken.	4	2	8	Site Foreman Engineers Plant Operator Site staff

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Working near Underground services	Workers struck by plant, Service strike, electrocution, underground services not identified on plans.	5	4	20	All services should be located and marked prior to commencement of excavation via dial before you dig or service locators. Where it is impossible to locate and mark all services a full time competent spotter should be with plant at all times. Any suspected services should be uncovered by hand digging.	3	3	9	Plant Operator Spotter Site Foreman
Working near overhead powerlines	Workers struck by plant, Service strike, electrocution,	5	4	20	No part of excavator shall come within 3 metres of powerlines as per "NO GO ZONE" rules and regulations as stipulated by Energy Safe Victoria. If any part of excavator is to come within 6.4 metres of powerlines a spotter must be present at all times. If these guidelines cannot be followed then work shall not commence until permission has been granted from the electricity company.	3	3	9	Plant Operator Spotter Site Foreman
Works near traffic	Plant / Traffic / Pedestrian interaction	4	3	12	Use trained traffic controllers and or barricades and signage to keep traffic separated from works. Ensure that there is a traffic management plan in place and that any interaction with pedestrian traffic is eliminated.	3	2	6	Site Foreman Plant Operator
Working or traversing on sloping ground	Rollover, spoil rolling onto staff working in trench	4	4	16	No plant or equipment is to work or traverse on slope over designated gradient as outlined in manufacturers user manual. If traversing slope use low gear and ensure that attachments are slewed to the uphill side of the plant and packed in the travel position.	2	2	4	Plant Operator Foreman

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Working Excavator as a crane	Slung load shifts, sling breaks. Lug on dipper arm breaks, incorrect lifting gear for the task, hydraulic line bursts, hot high pressure oil.	4	4	16	Use dogman/rigger if required. Ensure all lifting equipment is inspected prior to use, is appropriate for the task and is within test dates. Check safe working load and condition of equipment prior to activity being undertaken. Safe working load of plant must be identified and load chart referred to for any variances. Inspect excavator and approved lifting lug. Check burst protection fitted for any loads in excess of 1 tonne. At no time will a suspended load be lifted over any persons. Ensure that all workers are outside the extended height and maximum radius of the plant.	3	1	3	Plant Operator Dogman/riggers Site foreman
Loading trucks with an excavator	Material falling from bucket, bucket hitting truck, people being struck by falling object	4	4	16	Rear or side load trucks only. Do not load over truck cabin. Ensure that all personnel are outside the radius of the excavator. Truck driver to remain in cabin at all times unless there is a specific area designed as a plant no go zone area. No operating of the excavator whilst the truck is reversing. Do not overload the bucket.	2	2	4	Plant Operator Truck drivers Site foreman
Excavator to move loads eg. Concrete, rock, timber etc.	Uncontrolled load movement, load moves out of bucket.	4	3	12	Keep load as low as possible and as close as possible to plant. Reverse plant while carrying load if possible.	2	2	4	Plant Operator

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Excavator Backfills	Plant - personnel interaction Plant – plant interaction	4	3	12	Communication between spotter and all plant operators involved in this work task. Undertake risk assessment prior to backfilling.	2	3	6	Plant Operator Spotter
Using quick hitch and attachments on excavator	Attachments not made secure, operator accidentally releases quick hitch control, safety pin not inserted, oil spill while attaching hydraulic hoses.	5	4	20	Attachments made secure with safety locking pins. Quick hitch control switch cover locked in place. Operator to ensure safety pin is installed correctly by placing cutting edge of bucket on the ground and crowding bucket back and forth. When connecting/disconnecting hydraulic lines must ensure hydraulic valves are in closed position.	4	2	8	Plant Operator Site Foreman Workers
Working Excavator with Rock Breaker or Grab Attachment	Flying rock or concrete chips could strike surrounding workers or machinery. Noise	4	4	16	All persons and plant to remain clear of work zone where practical. If personnel are required in the work zone ear and eye protection must be worn and full face shield.	3	2	6	Plant operator Site foreman
Parking and maintaining excavator	Nips, pinch, crush	4	3	12	Operators to place hitch/bucket/attachment on the ground, apply park brake and isolation procedures to be implemented. Safety observer required if plant is to be operated during maintenance/inspection.	2	2	4	Plant Operator Site staff Site foreman
	Fall from heights Personal injury	4	4	16	If work platform is in excess of 2 metres high ensure it a has fall protection rail minimum 900mm high and not higher than 1100mm high. Fall protection will cover work platform from cabin to entry point.	3	2	6	Plant operator Site Foreman

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Hazardous substances used in excavator operation and maintenance (Refueling)	Inhalation, ingestion, spills, explosion	5	3	15	Operator of plant to ensure engine is off before refueling. Ensure correct footing, don't walk on uneven and slippery surfaces. ENSURE DELIVERY FUEL NOZZLE IS IN DIRECT CONTACT WITH FUEL TANK INLET SO AS TO AVOID BUILD UP OF STATIC ELECTRICITY. Under no circumstances use a mouth operated siphon hose for decanting liquid hazardous substances. Use spill kit to capture spillage and ensure that the contaminated waste material is disposed of as a prescribed waste. Ensure correct PPE in use whilst refueling. Ensure spill kits are available and located close to designated refueling area. Clean up and report spills as soon as they happen.	3	2	6	Plant Operator Site Foreman Fuel delivery driver
Working in or near waterways	Impact on waterway from works leading to an impact on water quality	4	5	20	If required a permit to work in or near the waterway is to be sought from the local waterway authority prior to any works commencing in or near a waterway. No plant is to track through any waterway. No plant is to track through any waterway. If crossing is required then approval shall be sought from the local waterway authority before any work can take place. Ensure that erosion and sediment controls are in place prior to disturbance of the waterway	3	3	9	Project Manager Site Foreman Site staff Plant operator

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Use Excavator in an environmentally sensitive work area	The following could negatively impact environmentally sensitive areas eg. Wetlands. Spillage of hazardous substances eg. fuel, oil Creation of excessive dust. Damage or removal of vegetation. Incorrect placement of stockpiles	3	4	12	Ensure that any relevant local/state and/or federal approvals/ permits have been obtained before commencing work in that area. Ensure that any flagging off of particular areas within the environmental sensitive area is in place as stated by any relevant approvals and/or permits. Ensure any stockpiles are placed away from any known sensitive or no-go zones. Ensure water is used (via hose and or watercart) to suppress dust, ensuring any run off is diverted away from sensitive areas. Ensure that a spill kit/s is located nearby to the environmental sensitive area for a quick response to any spills of oils or fuels. Ensure that the contaminated material is bagged and disposed of as a prescribed waste. Report any spills to site foreman/project manager.	2	2	4	Plant Operator Foreman workers
Loading excavator on to float	Uncontrolled plant movement	4	3	12	Float to park on level, firm surface, spotter to guide excavator on to float. No personnel to be standing on float whilst plant is being moved. Spotter to be standing outside the overall extended height of the plant and have eye contact with the operator at all times. Hand signals to be identified prior to activity commencing. Ensure that area is identified by site supervisor to ensure that the no go zone areas are not encroached. Ensure that a suitable loading and unloading area is identified by the site foreman.	2	1	2	Plant Operator Spotter Float driver

Additional Site Specific Hazards and Controls

Hazard/Aspect (Procedure Step)	Impact (What can go wrong)	Risk Score Without controls			Management Controls (Controls to be in place in order to manage potential hazards)	Risk Score With controls			Person Responsible (To ensure controls are applied)
		Cons	Prob e	Risk		Cons	Prob e	Risk	

SWMS Acceptance

We the undersigned confirm that we have read and clearly understand this safe work method statement.We confirm we have the required training and qualifications to carry out the required tasks in accordance with the control measures outlined in this safe work method statement. We also understand that if the controls as outlined cannot be applied then work must cease immediately.

Date	Name	Company	Position	Signature

Review and Monitoring

Review No.	1	2	3	4	5	6
Name						
Date						

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